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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/674,924	11/08/2000	Masahiko Yanagisawa	105013	8704

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EXAMINER

WILLIAMS, ALEXANDER O

ART UNIT PAPER NUMBER

2826

DATE MAILED: 01/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/674,924

Applicant(s)

YANAGISAWA

Examiner

Alexander O Williams

Art Unit

2826

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 October 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) 8,9,11,12,14,15,17,18,20 and 21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7,10,13,16,19 and 22-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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Serial Number: 09/674924 Attorney's Docket #: 105013

Filing Date: 11/8/2000;

Applicant: Yanagisawa

Examiner: Alexander Williams

Applicant's Amendment in Paper No. 13, filed 10/8/02 has been acknowledged.

This application contains claims 8, 9, 11, 12, 14, 15, 17, 18, 20 and 21 drawn to an invention non-elected with traverse in Paper No. 10. A complete response to the final rejection must include cancellation of non-elected claims or other appropriate action (see 37 CFR § 1.144 & MPEP § 821.01).

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed (for example, "method of making same" should be deleted).

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:
A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1 to 7, 10, 16, 19 and 22 to 24 are rejected under 35 U.S.C. 102(b) as being anticipated Buck et al. (Europe Patent # 0057253 A2).

For example, in claim 1, Buck. **(figures 1 to 7)** specifically figure 6 show a flexible interconnect substrate comprising: a tape-shaped base substrate **1**; and an interconnect pattern **8** formed on the base substrate, wherein the base substrate includes: a first region **6** in which a predetermined interconnect pattern has been formed an which will form a unit when separated from the base substrate; and a second region **26** positioned next to the first region in the longitudinal direction of the base structure; and wherein the second region having a low bending resistance portions which are formed in regions that exclude and sandwich a central portion of the second region in the widthwise direction of the base substrate, for ensuing that the second region bends more readily in the direction in which the longitudinal axis of the base structure bends, in comparison with the first region.

Claim 1 to 7, 10, 16, 19 and 22 to 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kunio (Japan Patent Application # 4-162440) in view of Buck et al. (Europe Patent # 0057253 A2).

For example, in claim 1, Kunio. **(figures 1 to 6)** specifically figure 2 show a flexible interconnect substrate comprising: a tape-shaped base substrate **12**; and an interconnect pattern **2** formed on the base substrate, wherein the base substrate includes: a first region **5** in which a predetermined interconnect pattern has been formed an which will form a unit when separated from the base substrate; and a second region **1** positioned next to the first region in the longitudinal direction of the base structure; and wherein the second region has a low-bending-resistance portion **4** which is formed in a region that excludes a central portion of the second region in the widthwise direction of the base structure, for ensuing that the second region bends more readily in the direction in which the longitudinal axis of the base structure bends, in comparison with the first region (see claims, page 2, upper right column, lines 7-16). Kunio fails to explicitly show the second region having a low bending resistance portions which are formed in regions that exclude and sandwich a central portion of the second region in the widthwise direction of the base substrate.

Buck et al. is cited for showing a tape-like substrate for making integrated circuits. Specifically, Buck et al. (figures 1 to 7) specifically figure 6 show slotted holes

26 between integrated circuit zones **6** for the purpose of increasing flexibility of the carrier.

Therefore, it would have been obvious to one of ordinary skills in the art to use Buck et al.'s slotted holes to modify Kunio et al.'s hole for the purpose of increasing flexibility of the carrier.

Claims 1 to 7, 10, 16, 19 and 22 to 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirotaka (Japan Patent Application # 5-121486) in view of Buck et al. (Europe Patent # 0057253 A2).

For example, in claim 1, Hirotaka. (**figures 1a to 8**) specifically figure 1c show a flexible interconnect substrate comprising: a tape-shaped base substrate **17a**; and an interconnect pattern **3** formed on the base substrate, wherein the base substrate includes: a first region **7** in which a predetermined interconnect pattern has been formed an which will form a unit when separated from the base substrate; and a second region **20** positioned next to the first region in the longitudinal direction of the base structure; and wherein the second region has a low-bending-resistance portion **20a** which is formed in a region that excludes a central portion of the second region in the widthwise direction of the base structure, for ensuing that the second region bends more readily in the direction in which the longitudinal axis of the base structure bends, in comparison with the first region (see Par. Nos. [0010] – [0013]). Hirotaka fails to explicitly show the second region having a low bending resistance portions which are formed in regions that exclude and sandwich a central portion of the second region in the widthwise direction of the base substrate.

Buck et al. is cited for showing a tape-like substrate for making integrated circuits. Specifically, Buck et al. (figures 1 to 7) specifically figure 6 show slotted holes **26** between integrated circuit zones **6** for the purpose of increasing flexibility of the carrier.

Therefore, it would have been obvious to one of ordinary skills in the art to use Buck et al.'s slotted holes to modify Hirotaka's hole for the purpose of increasing flexibility of the carrier.

Claims 1 to 7, 10 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hutchison et al. (U.S. Patent # 4,132,856) in view of Buck et al. (Europe Patent # 0057253 A2).

For example, in claim 1, Hutchison et al. (**figures 1 to 12**) specifically figure 4 show a flexible interconnect substrate comprising: a tape-shaped base substrate **12**; and an interconnect pattern **14** formed on the base substrate, wherein the base substrate includes: a first region **50** in which a predetermined interconnect pattern has been formed and which will form a unit when separated from the base substrate; and a second region **56** positioned next to the first region in the longitudinal direction of the base structure; and wherein the second region has a low-bending-resistance portion **58** which is formed in a region that excludes a central portion of the second region in the widthwise direction of the base structure, for ensuing that the second region bends more readily in the direction in which the longitudinal axis of the base structure bends, in comparison with the first region. Hutchison et al. fails to explicitly show the second region having a low bending resistance portions which are formed in regions that exclude and sandwich a central portion of the second region in the widthwise direction of the base substrate.

Buck et al. is cited for showing a tape-like substrate for making integrated circuits. Specifically, Buck et al. (figures 1 to 7) specifically figure 6 show slotted holes **26** between integrated circuit zones **6** for the purpose of increasing flexibility of the carrier.

Therefore, it would have been obvious to one of ordinary skills in the art to use Buck et al.'s slotted holes to modify Hutchison et al.'s hole for the purpose of increasing flexibility of the carrier.

Initially, and with respect to claims 16, 19 and 22 to 24, note that a "product by process" claim is directed to the product per se, no matter how actually made, In re Hira, 190 USPQ 15 at 17 (footnote 3). See also In re Brown, 173 USPQ 685; In re Luck, 177 USPQ 523; In re Wertheim, 191 USPQ 90 (209 USPQ 554 does not deal with this issue); In re Fitzgerald, 205 USPQ 594, 596 (CCPA); In re Marosi et al., 218 USPQ 289 (CAFC); and most recently, In re Thorpe et al., 227 USPQ 964 (CAFC, 1985) all of which make it clear that it is the final product per se which must be determined in a "product by process" claim, and not the patentability of the process, and that, as here, an old or obvious product produced by a new method is not patentable as a product, whether claimed in "product by process" claims or not. Note that Applicant has burden of proof in such cases as the above case law makes clear.

Claims 16, 19 and 22 to 24 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Hutchison et al. (U.S. Patent # 4,132,856) in view of Buck et al. (Europe Patent # 0057253 A2).

As to the grounds of rejection under section 103, see MPEP § 2113.

Claims 16, 19 and 22 to 24 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Buck et al. (Europe Patent # 0057253 A2).

As to the grounds of rejection under section 103, see MPEP § 2113.

Response

Applicant's arguments filed 10/8/02 have been fully considered, but are moot in view of the new grounds of rejections detailed above.

The insertion of Applicant's additional claimed language, for example, "in claim 1" cause for further search and consideration to make this action final.

Applicant's amendment necessitated the new grounds of rejection. Accordingly, **THIS ACTION IS MADE FINAL**. See M.P.E.P. § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

The listed references are cited as of interest to this application, but not applied at this time.


Field of Search	Date
U.S. Class and subclass: 257/668,666,692,693,696,698,671-673	5/4/02 12/27/02
Other Documentation: foreign patents and literature in 257/668,666,692,693,696,698,671-673	5/4/02 12/27/02
Electronic data base(s): U.S. Patents EAST	5/4/02 12/27/02

Papers related to this application may be submitted to Technology Center 2800 by facsimile transmission. Papers should be faxed to Technology Center 2800 via the Technology Center 2800 Fax center located in Crystal Plaza 4-5B15. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The Technology Center 2800 Fax Center number is (703) 308-7722 or 24. Only Papers related to Technology Center 2800 APPLICATIONS SHOULD BE FAXED to the GROUP 2800 FAX CENTER.

Any inquiry concerning this communication or any earlier communication from the examiner should be directed to **Examiner Alexander Williams** whose telephone number is **(703) 308-4863**.

Any inquiry of a general nature or relating to the status of this application should be directed to the **Technology Center 2800 receptionist** whose telephone number is **(703) 308-0956**.

12/27/02


Primary Examiner
Alexander O. Williams